

YUGOSLAVIA

Ljubica HRISTIC-SOJIC and P. STUPAR, Department of Forensic Medicine,
Faculty of Medicine (Institut za sudsku medicinu Medicinskog fakulteta),
University of Belgrade.

4 "Case of Homicide with Parathion."

Zagreb, Arhiv za Higijenu Rada i Toksikologiju, Vol 12, No 3-4, 1961;
pp 195-198.

Abstract [English summary modified] Parathion was added to drinking water stored in the field; intended victim was over 70 years old and it is doubtful that there would have been any suspicions about his sudden death had not another neighbor drunk of the same water by chance, succumbing also in a very similar manner. This eventually led to necropsy, analysis, confession. Plea for tighter control of such pesticides and for necropsy of all persons who die without being treated by a physician, also in the rural hinterland.

1/1

JOKANOVIC, Dobrivoje, dr., doc.; HRISTIC-SOJIC, Ljubica, dr.

Accidental poisoning with silver nitrate during therapy. Med. glas. 15 no.9/10:423-424 0 '61.

1. Institut za sudsku medicinu Medicinskog fakulteta Univerziteta u Beogradu (Upravnik: prof. dr J. Bogicevic).

(SILVER NITRATE toxicol)

PEJAKOVIC, Samuilo, dr.; HRISTIC-SOMIC, Ljubica, doc. dr.; TODOROVIC, Jovan dr.

Ebstein's anomaly of the tricuspid valve as a cause of sudden death.
Med. glas. 17 no.6:262-264 Je-Jl '63.

1. Institut za sudsku medicinu Medicinskog fakulteta u Beogradu
(Upravnik: prof. dr. J. Bogicevic).

ATANACKOVIC, Ana; LAMBIC, Ivan; VASILIC, Momcilo; HRISTIC-SOJIC, Ljubica

Acute myocardial infarction with a negative and insufficiently manifest electrocardiographic picture. Srpski arh. celok. lek. 89 no.1: 87-91 Ja '61.

1. Interna klinika B Medicinskog fakulteta Univerziteta u Beogradu.
Upravnik: prof. dr Radivoje Berovic. Institut za sudsku medicinu
Medicinskog fakulteta Univerziteta u Beogradu. Upravnik: prof. dr
Julijana Bogicevic.

(MYOCARDIAL INFARCT diag) (ELECTROCARDIOGRAPHY)

YUGOSLAVIA

PEJAKOVIC, Samuilo, Dr; HRISTIC-SOJIC, Liubica, Dr; and TODOROVIC, Jovan, Dr;
Department of Forensic Medicine of Medical Faculty (Institut za sudsku
medicinu Medicinskog fakulteta) Head (Upravnik) Prof Dr J. B. GICEVIC; Belgrade.

"Sudden Death Caused by Ebstein Anomaly of Tricuspid Valve."

Belgrade, Medicinski Glasnik, Vol 17, No 6-7, Jun-Jul 63; pp 262-263.

Abstract [French summary modified] : Report of sudden death of 26-year-old woman with Ebstein syndrome. She had had cardiovascular complaints for a long time but was never properly examined or diagnosed and could do light work. Eventually the myocardium was unable to bear the strain. Forensic discussion. Two Yugoslav and 6 Western references.

1/1

STEFANOVIC, Petar; DJORDJEVIC, Slobodan; HRISTIC-SCVIC, Ljubica

Complications following the extraction of foreign bodies from the lower respiratory system. Srpski arh. celok. lek. 92 no.48: 413-419 Ap '64

1. Otorinolaringološka klinika Medicinskog fakulteta Univerziteta u Beogradu (Upravnika prof. dr. Srećko Podvinac); Institut za sudsku medicinu Medicinskog fakulteta Univerziteta u Beogradu (Upravnika prof. dr. Julijana Bogicevic).

HRISTIC-SOJIC, Ljubica, doc. dr.; MICIC, Sonja

Medico-social aspects of fatal complications in criminal abortion.
Med. glas. 19 no.4:93-97 Ap-May '65.

Importance of correct description of mechanical trauma in medical
records. Ibid.:99-102

1. Institut za sudsku medicinu Medicinskog fakulteta u Beogradu
(Upravniki: prof. dr. J. Bogicevic).

L 32803-66

ACC NR: AP6023773

SOURCE CODE: YU/0015/65/000/04-/0093/0097

AUTHOR: Hristic-Sojic, Ljubica (Doctor; Docent); Micic, Sonja (Doctor)

ORG: Department of Forensic Medicine /headed by Professor, Doctor J. Bogicevic/,
Medical College, Belgrade (Institut za sudsku medicinu Medicinskog fakulteta)

TITLE: Medical and social aspects of mortality caused by criminal abortion

SOURCE: Medicinski glasnik, no. 4-5, 1965, 93-97

TOPIC TAGS: injury, biologic reproduction, surgery

ABSTRACT: Review of data on 27 necropsies of women who died as sequelae to criminal abortion from among 2,641 necropsies carried out during the three-year period, 1960-1962. Analysis revealed that this is only a small proportion of fatal cases attributable to criminal abortion in Belgrade and environs; the primary cause is inadequate education as to a) contraceptive practices, b) possibility of steps to obtain permission for legalized abortion, and c) dangers of criminal abortion. Five of the cases are described in some detail. [JPRS]

SUB CODE: 06 / SUEM DATE: none / ORIG REF: 007 / OTH REF: 011

Cord 1/1

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L 32799-66

ACC NR: AP6023775

SOURCE CODE: YU/0015/65/000/04-/0099/0102

AUTHOR: Hristic-Sojic, Ljubica (Docent; Doctor); Micic, Sonya (Doctor)

ORG: Department of Forensic Medicine /headed by Professor, Doctor J. Bogicovic/,
Medical College, Belgrade (Institut za sudsku medicinu Medicinskog fakultet)

TITLE: Importance of proper records of mechanical lesions in medical case histories

SOURCE: Medicinski glasnik, no. 4-5, 1965, 99-102

TOPIC TAGS: injury, medicine

ABSTRACT: Review of needs for complete description of wounds during the first medical examination of victims of any accident rather than resorting to the frequent practice of merely writing down the conclusions of the examining physician. Description of 4 cases where failure to record in sufficiently detailed manner the condition of the lesions at the time of the discovery of the body led eventually to insoluble difficulties. [JPRS]

SUB CODE: 06 / SUBM DATE: none

Card 1/1

BORZA, N., inginer-sef; HRISTOFOROV, A., inginer specialist

Application of the new technology in designing electric
power constructions. Energetica Rum 12 no. 1: 12-21 Ja '64.

RUMANIA

TRANDAFILOV, T., Professor; DRUMEV, D., Docent, MD; COJUHAROV, P.,
MD; HRISTOV, K., Pharmacist.

Bucharest, Farmacia, No 3, Mar 63, pp 129-139.

"New Trends and Achievements in Pharmaceutical Products with
Antibiotics."

(4)

HRISTOV, S.

"Geologic and hydrologic problems in the construction of the road from
Prizren to Strbce."

p. 3 (Put I Saobracaj) No. 5/6, May/June 1957
Belgrade, Yugoslavia

SO: Monthly Index of East European Accessions (EEAI) IC. Vol. 7, no. 4,
April 1958

HRISTOV, Tv., conf.; TOLOVA, E., asist.

Contributions to the utilization of fibrous materials from
hardwood (*Ailanthus glandulosa*) in manufacturing some prin-
ting paper sorts. Cel hirtie 10 no. 11:377-380 N°61

1. Institutul tehnologic din Sofia

L 43635-66 IJP(c)

ACC NR: AT6032337

SOURCE CODE: HU/2504/65/052/03-/0295/0303

AUTHOR: Hristov, V. K. (Sofia)

ORG: none

26
Bt1

TITLE: Compensation of correlated observations under the conditions of a singular correlation matrix 6

SOURCE: Academia scientiarum hungaricae. Acta technika, v. 52, no. 3-4, 1965, 295-303

TOPIC TAGS: mathematic matrix, mathematics

ABSTRACT:

If an adjustment according to conditional observations is partially accomplished, the adjusted values will be correlated and can be subjected to an additional common adjustment with the remaining observations, in all cases under the application of the general principle of least squares. In this event the correlation matrix is a singular one (i.e., with a zero determinant). In spite of this, the procedure can be employed, leading to the same corrections and weight. An example was presented to illustrate the considerations involved. Orig. art. has: 2 figures and 45 formulae [JPRS: 34,672]

SUB CODE: 12 / SUBM DATE: 23Feb65

LS
Card 1/1

SADIKARIO, A.; MLADENOVSKI, B.; DZARLIEVA, R.; HRISTOVA, C.

Some special aspects of diabetes mellitus in childhood.
God. zborn. med. fak. Skopje 11:165-179 '64.

1. Klinika za detski bolesti pri medicinskiot fakultet,
Skopje (upravitel: prof. d-r. H. Duma).

ACC NR: AP6032916

SOURCE CODE: BU/0011/66/019/008/0725/0728

AUTHOR: Borissov, G.; Hristova, N.

ORG: Institute of Organic Chemistry, Bulgarian Academy of Science

TITLE: Addition of bis(β -chloroethyl) phosphite to Schiff bases

SOURCE: Bulgarska akademiya na naukite. Doklady, v. 19, no. 8, 1966, 725-728

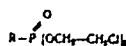
TOPIC TAGS: herbicide , aminoalkylphosphonic acid ester, bischloroethyl phosphite, Schiff base, weed killer, phosphonic acid, ester, amino acid

ABSTRACT: In a search for new herbicides, a series of esters of α -aminoalkylphosphonic acids were obtained by the addition of bis(β -chloroethyl) phosphite to the corresponding Schiff bases. The reaction proceeds at 25—70°C in the presence of saturated methanolic solution of sodium methoxide. Composition, yields, and melting points of the esters are given in the table.

Card 1/2

ACC NR: AP6032916

Table 1.



No	R	Melting point °C	Yield	Analysis									
				C%		H%		P%		N%		Cl%	
				found	calcd.	found	calcd.	found	calcd.	found	calcd.	found	calcd.
1		103-106	90.00	53.07	52.50	5.40	5.20	7.84	8.03	3.50	3.60	18.76	18.10
2		95-96	63.00	58.00	57.53	5.19	5.07	8.00	7.07	3.85	3.19	16.40	16.21
3		104-105	70.00	57.57	57.53	5.21	5.02	7.27	7.07	3.16	3.19	15.73	15.21
4		99-100	68.50	57.87	57.53	4.97	5.02	6.99	7.07	3.37	3.19	15.56	15.21
5		110-117	57.00	67.08	61.47	4.86	4.91	6.12	6.56	3.06	2.87	14.03	14.54
6		103-106	70.00	61.54	61.54	4.06	4.91	6.50	6.56	3.63	2.87	13.98	14.54
7		114-118	90.00	57.44	57.53	5.28	5.07	6.98	7.07	3.10	3.19	15.70	15.19
8		109-110	55.00	61.58	61.47	4.88	4.91	7.10	6.56	2.95	2.87	13.91	14.54
9		138-140	66.50	61.22	61.47	5.04	4.91	6.33	6.56	3.02	2.87	14.81	14.54

[WA-50;CBE

No. 12]

Card 2/2 SUB CODE: 07/ SUBM DATE: none/ ORIG REF: 001/ OTH REF: 001/ SOV REF: 006/

HRISTOW, W.

Flexure invariants in geodesy and their correlations. In German. p. 199.
Vol 13, No1/2, 1955. ACTA MICROBIOLOGICA and ACTA TECHNICA. Budapest, Hungary.

So: Eastern European Accession. Vol 5, No 4, April 1956

HRISTOW, W.

Classic and modern exactness-estimation of some compensation cases; also, discussion by J. Bohm and others. p. 17

ACTA TECHNICA. (MAGYAR TUDOMANYOS AKADEMIA) Budapest, Hungary.
Vol. 23, no. 1/3, 1959

Monthly list of East European Accessions (EEAI). IC. Vol. 9, no. 1, Jan., 1960.

Uncl.

HRISTU, C.

HRISTU, C. Excavators lifted to the top of a mountain. p. 3. ~~Powerful~~
~~weapon in the flight for peace and progress.~~ p. 4. ~~Positive~~
~~results of the Moscow treaties.~~ p. 4. Vol. 7, no. 296,
Sept. 1955. CONSTRUCTORUL. Bucuresti, Rumania

SOURCE: East European Accessions List (EEAL) LC Vol. 5, No. 6 June 1956

HRISTU, C., ing.

Plans of the Technical Organizational Measures exemplarily
achieved. Constr Buc 16 no. 748:2 9 May '64.

1. Head of the Economical Sector of the D.G.I.S. in the Ministry
of Education and Culture.

STISU, Construction, 1961.

Financial construction materials on the world market. Constr. Ind. 17
no. 782:3 5 Jan 1961.

1. Head of the Scientific Dept. of the U.S.S.R. Ministry of the
Construction Industry.

...the manufacture of industrial
...the ... of the ...
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...the ... of the ...

HRTVANK, I.

"The case of a rapid transformation in the resistance welding of carbon steels."

p. 297 Vol. 6, no. 10, Oct. 1957 (Zvaranje)
Prague, Czechoslovakia

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,
April 1958

The preparation of allylmagnesium bromide. D. Mikulasova, A. Hrivik, and I. Sinek (Slovenska) Vysoka Skola Techn., Bratislava, Czech.). Chem. Zvesti 11: 522-523 (1967) (German summary).--The best suitable mole ratio of allyl bromide to Mg (particle size 0.1-0.4 mm.) and allyl bromide to ether in the case of $CH_2=CHCH_2MgBr$ were studied. By using mole ratio of allyl bromide to Mg 1 and ether 1, 80-82% yield was obtained.

CZECHOSLOVAKIA/Chemistry of High Molecular Properties.

I.

Abs Jour : Ref Zhur - Khimiya, No 19, 1958, 66372

Author : Mikulasova, D., Hrivik, A.

Inst : -

Title : Polymerization of Tetrasubstituted Allylmethylsilanes.
I. Kinetics of Polymerization of Allyltrimethylsilane
and Diallyldimethylsilane. II. Mechanism of Radical
Polymerization of Allyltrimethylsilane.

Orig Pub : Chem. zvesti, 1957, 11, No 11, 641-650; No 12, 708-714.

Abstract : I. The polymerization of allyltrimethylsilane (I) and
diallyldimethylsilane (II) was investigated, initiated
by peroxide of ditertiary butyl (III) (1-5%), at 120-150°
(depth of polymerization 5%). The total energies
of the activation of polymerization of I and II equal 34-
35 and 24.5-25.2 large calories/mole respectively.
The rate of polymerization is proportional to the concen-
tration of the initiator.

Card 1/2

CZECHOSLOVAKIA/Chemistry of High Molecular Properties.

I.

APPROVED FOR RELEASE: 09/21/2001

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Abs Jour : Ref Zhur - Khimiya, No 19, 1958, 66372

The average degree of polymerization of I polymers
equals 3.8-4.7. That of II equals 4.4-9.3. The amount
of average molecular weight does not depend on the con-
centration of the initiator, but increases with an in-
crease of temperature.

II. A method is described for the determination of
tert-butyl alcohol in the polymerization system. During
the polymerization of I initiated by 1% of III, the
formation of tert-butyl alcohol was established, it is
clear, as being a result of a side reaction.

Card 2/2

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Polymerization of tetrasubstituted allylmethylsilanes.
IV. Copolymerization of methyl methacrylate with triallyl-
methylsilane and tetraallylsilane. D. Mikulášová, J.
Paylinec, I. Šimek, and A. Hrivik (Slovenská vysoká škola
tech., Bratislava, Czechoslovakia) Chem. zvesti 13, 228-33 (1989)
(German summary); cf. C.A. 52, 13616b.—The copoly-
merization of Me methacrylate with 1-10% of triallyl-
methylsilane or of tetraallylsilane with Br_2O_3 as an initiator
is described. Up to 10-15% conversion, a fully sol. poly-
mer is formed. The polymerization of Me methacrylate is
retarded or inhibited by the action of allylsilanes.

Jan Micka—

9-9

L 45358-66 T/EWP(j) IJP(c) JW/RM

ACC NR: AP6033607

SOURCE CODE: CZ/CO43/66/000/001/0061/0068

AUTHOR: Hrivik, Alexander--Grivik, A. (Engineer; Candidate of sciences; Bratislava)

ORG: Department of Organic Technology, Slovak Technical University, Bratislava 38
(Katedra organickej technologic Slovenskej vysokej skoly technickej) B

TITLE: Study of the adsorption of acrylonitrile vapors by polymers containing preadsorbed benzoylperoxide

SOURCE: Chemicke zvesti, no. 1, 1966, 61-68

TOPIC TAGS: gas adsorption, acrylonitrile, polymer physical chemistry, benzoyl peroxide, polymerization

ABSTRACT: The adsorption of acrylonitrile vapors on polyvinylchloride and polypropylene containing preadsorbed benzoylperoxide was studied by means of sorption balances with a quartz spiral. The study was conducted at 60°C. The adsorption and the polymerization of the vapors occur simultaneously. The adsorbed amount of vapors depends on the size of the polymer grains, and upon the interaction of the sorbate and the sorbent. Polyvinyl chloride and polypropylene polymers behave in a different manner as far as the quantity of vapors that can be adsorbed by a definite amount of the polymer is concerned. The polymerization of the adsorbed acrylonitrile vapors is a function of the pressure of these vapors as well as of the properties of the polymer on which they are adsorbed. Orig. art. has: 12 figures and 5 formulas. [JPRS: 34,805]

SUB CODE: 07 / SUBM DATE: 29Sep65 / ORIG REF: 003 / SOV REF: 002

OTH REF: 004

Card 1/1 *aww*

D920 1651

TRIVIKOVA, J.

CZECH

Reaction kinetics in the aging of natural rubber by the infrared spectrograph. IV. Effect of the wavelength of radiation and the temperature on aging by light. A. Trád, V. Kella, and J. Triviková (Slovenská vysoká škola technická a vysoká škola ekonomická, Bratislava, Czech.). *Chem. Zvesti* 8, 3-23 (1964); cf. *C.A.* 48, 8574e, 8153b, 11101d. The interrelation of the effect of the intensity of radiation and temp. on the aging of rubber was studied. The upper limit of the effectiveness of light is in an area 4300 Å. Increasing temp. accelerates oxidation considerably, but it is retarded by increasing intensity of radiation. Calorimetric analysis shows an exponential relation of the length of the induction period and the intensity of radiation at const. temp. and a linear relation of the height of the reaction curves and temp. with const. radiation. In the aging of natural rubber there is, at the same time, an oxidative cleavage and branch chaining (vulcanization). Heat accelerates oxidation, and radiation accelerates vulcanization.

Jan Micka

HRIVIKOVA, JOJANA

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M.A. YOUTZ
2 copies

Reaction kinetics in the aging of natural rubber by infrared spectroscopy. V. Aging accelerated by heat. Vojtech Kral, Alexander Tkac, and Jolana Hrivikova (Slovenska vysoká škola tech., Bratislava, Czechoslovakia). Chem. Listy 49: 1433-41 (1955); cf. C.A. 49, 6639A. Heat aging of rubber between 60 and 160° as measured by the change of the no. of C=O, O-H, and C=C groups has been investigated by infrared spectroscopy. Contrary to light aging, heat aging proceeds uniformly in the whole specimen thickness at temps. above 80° but has a superficial character below this temp. The time curves of C=O and O-H groups run parallel, the only difference being that the no. of O-H groups decreases after reaching the max. The heights of the S-shaped kinetic curves depend on temp., show a min. in the range between 75 and 95°, and above a certain temp. height remain const. (C=O above 120°, O-H above 100°). Activation energies calcd. from the induction periods are 21,200 and 21,300 cal./mole, resp., for C=O and O-H groups; these values agree well with the activation energy calcd. from the temp. dependence of the max. rate of oxidation, 21,000 cal./mole. B. Erdős

(2)

HRIVIKOVA J

Category : CZECHOSLOVAKIA/Optics - Spectroscopy

K-6

Abs Jour : Ref Zhur - Fizika, No 2, 1957, No 5121

Author : Kello, V., Tkac, A., Hrivikova, J.

Title : Study of Aging of Natural Rubber using Infrared Spectroscopy. V.
Thermal Acceleration of Aging

Orig Pub : Sb. chekhosl. khim, rabot, 1956, 21, No 2, 281-290

Abstract : No abstract

Card : 1/1

CZECHOSLOVAKIA

TRAC, A.; HRIVIKOVA, J.

Department of Physical Chemistry, Slovak Institute
of Chemical Technology, Bratislava - (for both).

Prague, Collection of Czechoslovak Chemical Communi-
cations, No 11, November 1965, pp 3861-3874.

"On the theory of macroradical termination. Part 1:
Changes in the level of radicals detected spectro-
scopically".

HRIVIKOVA, J.

CHROMOSOMALIA

TKAC, A.; KELLO, V.; HRIVIKOVA, J.

Dept. of Physical Chemistry, Slovak Technical Univ., Bratislava (for all)

Prague, Collection of Czechoslovak Chemical Communications, No 2, Feb
1966, pp 351-363

"On the theory of macroradical termination. Part 4: Mechanism of
termination of macroradicals."

HRIVNAK, Juraj, inz.

Relay circuit control with regard to transient states. Automatizace
5 no.12:328-331 D '62.

1. Elektromontazne zavody, n.p., Bratislava.

HRIVNAK, L.

Interaction of conduction electrons in solids. Chekhosl fiz
zhurnal 13 no.7:482-492 '63.

1. Katedra fyziky Vysokej školy dopravnej, Zilina.

HRIVNAK, L.

The dependence of current density on the electric field strength in homopolar semiconductors. Chekhosl fiz zhurnal 14 no.6: 459-468 '64.

1. Chair of Physics, Higher School of Transportation, Zilina, Marxa-Engelsa 25.

HRIVNAC, MILAN

Use of gas chromatography for analytical control of the production of raw naphthalene oil and its processing into pure naphthalene. Milan Hrivnác and Jaroslav Janák (Lab. analýzy plynů CSAV, Brno, Czech.). Chem. průmysl 9, 459-61(1959).—The chromatographic analysis was carried out in an app. which had atm. pressure at the entrance into the column and vacuum at the exit. The carrying gas was H₂, the temp. of the expts. was 220°, the detection was carried out by heat-conducting cells of Pt and the registration by compensation millivoltmeter (0-3 mv.). Three columns with small pressure drop were filled with 40-4 g. of Sterchamol which contained 25% of Apiezon L. The samples were introduced by injection with the aid of a micropipet. According to results obtained by analysis of 3 raw naphthalene oils, with freezing points 61, 66, and 70°, and with distn. curves 208-225, 211-224, and 210-225°, resp., it follows that with the aid of chromatographic analysis the oils are characterized more quickly and more exactly than empirically by f.p. and distn. curves. Analysis of raw naphthalene oil, raw naphthalene crystals, dripped-off naphthalene oil, and products of the pressing showed that by crystn. only the lowering of content of all accompanying compds. to approx. 40% occurred. By hot pressing lowering occurred to approx. 10% of the original content. The dripped-off oil contains 18% methylnaphthalenes, but the pressed-out oil, which is used as raw material for the production of methylnaphthalene, contains only 13%. In the examd. materials S is present as thionaphthene and its removal occurred at the same rate by crystn., hot pressing, by sublimation, and by distn., in each case by 60%. Sublimation, in contradistinction to distn., certainly does not lead to substantial increase of purity of the product. The colorimetric control of pure naphthalene is more advantageous than chromatographic analysis.

P. Četelář

80(NB)
4E3d
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JANAK, J.; HRIVNAC, M.;

Gas chromatography of nitrogen containing heterocyclic compounds.
I. Separation and analysis of quinoline and higher pyridine bases as
well as indoles by means of gas-liquid chromatography. Coll Cz Chem
25 no.6:1557-1565 Je '60. (EEAI 10:9)

1. Laboratorium fur Gasanalyse, Tschechoslovakische Akademie der
Wissenschaften, Brno.

(Chromatography)	(Nitrogen)	(Quinoline)
(Pyridine)	(Indole)	

HRIVNAC, Milan

"Gas chromatography 1960". Reviewed by Milan Hrivnac. Chem prum
12 no.2:94-95 F '62.

1. Ceskoslovenska akademie ved.

KOZANEK, Tibor; HRIVNAK, Benjamin

Technique of brass fitting casting. Slevarenstvi 10 no.11:474-476 N '62.

1. Slovenska armaturka, Myjava.

WOLF, A.; HRIVNAK, D.; HRUBY, S.

Endogenous alien substances formed in foods under the influence of ionising radiation. Cesk. hyg. 10 no.3:271-274 My '65

1. Katedra hygieny lekarske fakulty hygienicke Karlovy University, Praha.

HRIVNAK, Ivan, inz.

Problem of the solution of temperature compensation for
capillary viscosimeter. Automatizace 7 no. 3:68-70 Mr '64.

1. Slovnaft National Enterprise, Bratislava.

11540* Electrolytic Polishing of Metals for Metallographic Investigation. *Elektrolýtické leštenie kovov pre metalografické pozorovanie.* (Slovak: Ivan Hrivňák. *Zborník v. 1* no. 2, Feb 1956 p 48-48)
Techniques of electrolytic polishing in preparing specimens for micro-structural studies. Preparation of the electrolyte. Equipment used. Table, graph, micrographs, diagrams 4 ref

2222* (Czech.) Electrolytic Polishing of Metals. Elektro-
lytické leskocení kovů. Ivan Fritovský. Hutnické Listy, v. 11,
no. 10 (Oct. 1959), p. 594-597.
Explains the Jaquet-Roequet theory and mechanism of polishing
polycrystalline structures.

"APPROVED FOR RELEASE: 09/21/2001

CIA-RDP86-00513R000618220015-6

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APPROVED FOR RELEASE: 09/21/2001

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Electrolytic polishing for metallographic examination.
 1. max. 10 min. 2. 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836,

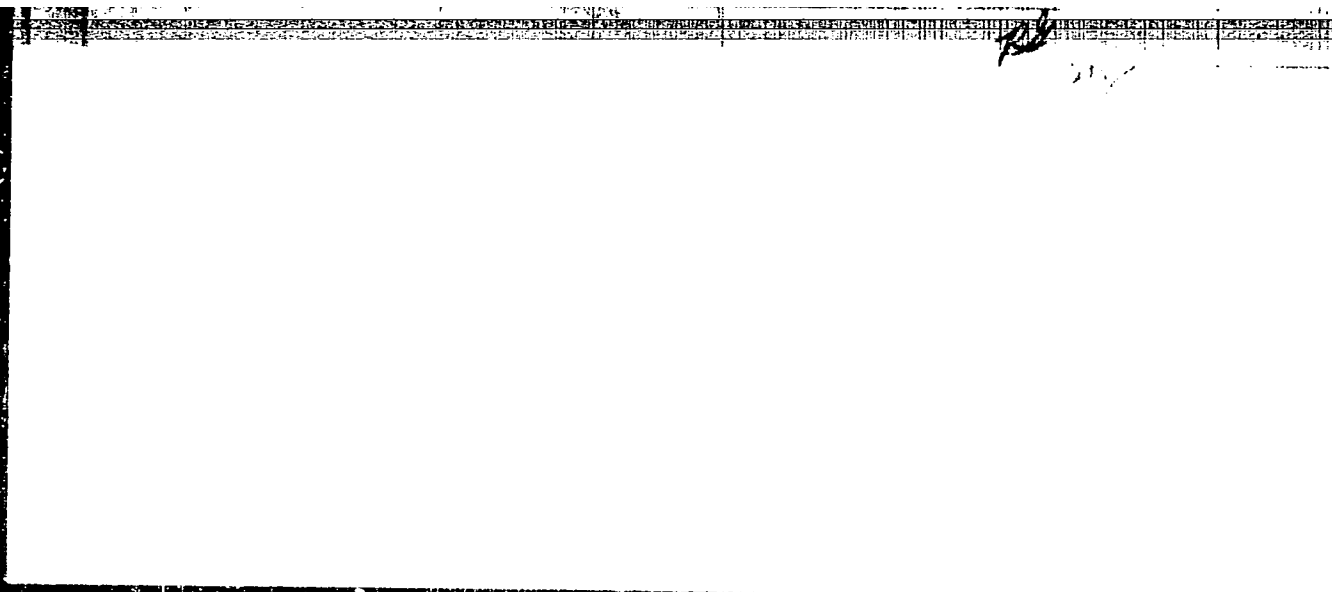
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HERVAK, IVAN

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HERC
1954 - Slovak - Grey Cast Iron Welding Metallurgy.
Monographia z druzinovej litiny. Ivan Hervak. Zodromie
1954, Bratislava. 15 mm
The effect of Si, Mn, P and other elements on the structure
and the graphitizing mechanism in the welding zone.
Factors influencing the quality of cast iron weld quality

"APPROVED FOR RELEASE: 09/21/2001

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APPROVED FOR RELEASE: 09/21/2001

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CZECHOSLOVAKIA/Solid State Physics - Phase Transitions in Solids E-6

Abs Jour : Ref Zhur - Fizika, No 6, 1958, No 13154

Author : Hrivnak Ivan

Inst : Not Given

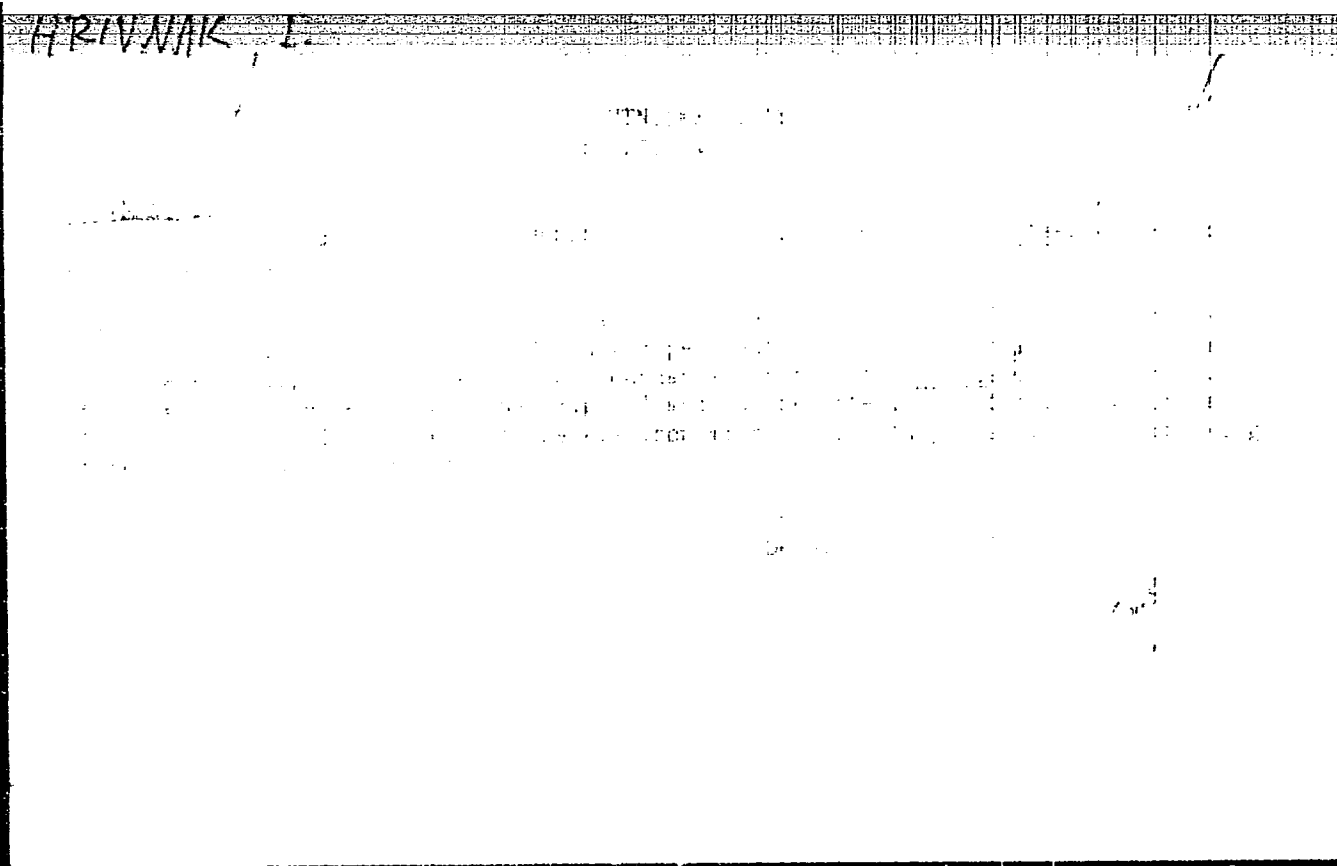
Title : High Speed Transformations in Contact Welding of Carbon Steels

Orig Pub : Zvaranic, 1957, 6, No 10, 297-299

Abstract : No abstract

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HRIVNAK, I.

Metallographic testing of transformer steels.

P. 1094. (HUTNICKÉ LISTY.) (Brno, Czechoslovakia) Vol. 12, No. 12, Dec. 1957

SO: Monthly Index of East European Accession (EEAI) LC. Vol. 7, No. 5, May 1958

HRIVNAK I.

CZECHOSLOVAKIA / Chemical Technology. Chemical Products. H
Electrochemical Products. Electroprecipitation.
Chemical Sources of Electric Power.

Abs Jour: Ref Zhur-Khimiya, 1958, No 20, 68082.

Author : Hrivnak I.
Inst : Not given.
Title : Electrolytes Employed in Making Metallographical
Polished Sections.

Orig Pub: Hutnicke listy, 1958, 13, No 2, 140-145.

Abstract: General review. It was established that for laboratory uses the most universal electrolytes are those having HClO_4 as the base. Good results were obtained with the use of H_3PO_4 , CrO_3 , and certain acids.

Card 1/1

HRIVNAK, I.

Limits of grains and their morphologic configuration. p. 528

ZVARACSKY SBORNIK. (Slovenska akademie vied) Bratislava, Czechoslovakia.
Vol. 8, no. 4, 1959

Monthly list of East European Acquisitions (EEAI), LC Vol.9, no. 2, Feb. 1960

Uncl.

HRIVNAK, I.

Contribution to the analysis of phases in austenite-ferrite welded joints. p.258.

AVARANIE. (Ministerstvo hutneho prumyslu a rudnych bani a Ministerstvo
strojareustva)
Bratislava, Estonia
Vol, 8, no. 9, Sept. 1959

Monthly List of East European Accessions (FEAI) LC, Vol. 8, No. 11.
Nov. 1959
Uncl.


CZECH/34-58-3-6/23

AUTHOR: Hrivňák, Ivan.

TITLE: A Variant of the Method of Using Carbon Extraction Replicas
Which is Applicable to Austenitic Steels (Modifikácia extrak-
čných uhlíkových replík pre austenitické ocele)

PERIODICAL: Hutnické Listy, 1959,¹⁴ Nr 3, pp 211-214 (including 2 plates)
(Czechoslovakia)

ABSTRACT: The method has been applied for studying austenitic Cr-Ni steels. For increasing the contrast the negative side of the carbon film was coloured with Cr. The structure of the austenitic grains and the slip mechanism was studied for a cast steel containing 17% Cr, 13.4% Ni, 0.05% C, 0.12% Ti and 0.2% W. Some of the obtained exposures (after exposures with magnifications of 10 000 and 11 000 times) are reproduced in Figs 1-6. Exposures obtained for a 16% Cr, 12.9% Ni steel are reproduced in Figs 7, 8 and 9, and exposures obtained for a 17.5% Cr, 11.9% Ni steel are reproduced in Fig 10. Finally, the structure of an 18 Cr-8 Ni steel is reproduced in Figs 11 and 12; Fig 11 was



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CZECH/34-58-3-6/23

A Variant of the Method of Using Carbon Extraction Replicas

produced without Cr coloration whilst Fig 12 was obtained after coloration with Cr. There are 12 figures and 2 references, of which 1 is Czech and 1 English.

ASSOCIATION: Výskumný ústav zvaračský, Bratislava (Welding Research Institute)

SUBMITTED: June 17, 1958.



Card 2/2

AUTHOR: Hrivňák, Ivan

CZECH/34-59-6-10/23

TITLE: Influence of the Deformation in the Cold State on the Internal Structure of Austenitic Grains. Electron-microscope Studies (Vplyv studenej deformácie na vnútornú štruktúru austenitických zrn. Electrono-mikroskopické štúdium)

PERIODICAL: Hutnické Listy, 1959, ^{v.14} Nr 6, pp 507-511 (Czechoslovakia)

ABSTRACT: The author has attempted to determine the analogy between the etch figures produced by means of a 10% HCl alcohol solution on the austenite of a monophase 16 Cr-13 Ni steel (0.07% C, 1.3% Mn, 0.2% Si, 0.008% S, 0.018% P, 16.5% Cr, 13.4% Ni and 0.5% Ti). The steel was resmelted in a h.f. furnace. Three states were investigated, namely, the as-cast state with a pronounced dendritic segregation, the homogenized state produced from the as-cast state by a 60% reduction in the cold state followed by recrystallization for three hours at 1200°C and quenching in water and, finally, in the homogenized state, ^{produced} by forging in the temperature range 1150-1050°C and cooling in air. The polished section was prepared in a solution of the type
 Card 1/3 $\text{HClO}_4 + \text{CH}_3\text{COOH} + \text{H}_2\text{O}$ at the usual current densities.

CZECH/34-59-6-10/23

Influence of the Deformation in the Cold State on the Internal Structure of Austenitic Grains. Electronmicroscope Studies

For revealing the internal structure, a 10% HCl solution in ethyl alcohol was used. The results were evaluated purely by means of a microscope. The electron microscope studies were made on a prototype microscope "Tesla BS-242". For producing the replicas, the negative colloidal imprint method with chromium tinting (Fig 4) and a modification of the extraction carbon replica, produced in a HCl alcohol solution and described in another paper (Ref 8), were used (Figs 1-3, 5-12). Morphological measurements yielded dimensions of 15×10^4 to 30×10^4 Å and these values are in good agreement with results of X-ray measurements. Corresponding with the internal structure of the austenite, the etch figures were in the shape of uniform cubes or other shapes delimited by simple linear surfaces. The magnitude of the elementary slip displacement was 300 Å in the given case. The influence of deformation in the cold state was fully analogous to the influence of the deformation in the cold state on the block structure;

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Influence of the Deformation in the Cold State on the Internal
Structure of Austenitic Grains. Electronmicroscope Studies

CZECH/34-59-6-10/23

intensive fragmentation (up to 5000 Å) and block
deorientation took place.

There are 12 figures and 10 references, 4 of which
are Czech, 6 English.

ASSOCIATION: VÚS Bratislava

SUBMITTED: January 16, 1959



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Card 3/3

CZECH/34-59-10-18/25

AUTHOR: Hrivnák, Ivan

TITLE: Colloquium on Metal Physics

PERIODICAL: Hutnicke Listy, 1959, Nr 10, pp 912-913

ABSTRACT: An all-Czechoslovak colloquium on metal physics was held in Bratislava on July 1-7 1959, under the auspices of the Welding Research Institute in co-operation with JCMF, VTS and the Czechoslovak Society for Electron Microscopy. 122 students from all over Czechoslovakia participated. The colloquium was inaugurated by Acad. J. Hronec, President of the Slovak Committee of JCMF. Docent Engineer Ryš gave a historical review of the study of metals and metal physics. During the subsequent days, 42 hours of lectures and 32 hours of laboratory work followed. Dr. A. Cížek presented a general paper on "The Subject Matter of Metal Physics". L. Hrivnák, PFUK Bratislava, together with E.F. Holländer, VUZ Bratislava, presented papers on the electron theory of metals. J. Kucera, Brno, presented a paper on "Diffusion in the Solid Phase". Several other papers were also read, some of which are mentioned. The aim ✓


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CZECH/34-59-10-18/25

Colloquium on Metal Physics

of the colloquium was to give the participants an overall picture of the present state of some branches of knowledge in the field of physics of metals, and also to provide a short course on electron microscopy.

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D007/D102

AUTHOR: Hrivňák, Ivan

TITLE: Thermal and phase analysis of the influence of welding
on the ageing of low-carbon steels

PERIODICAL: Zváračský sborník, no. 2, 1961, 186-211

TEXT: The study of low-temperature annealing (age-hardening) is very important for the investigation of processes connected with material ageing and for the determination of the weldability of low-carbon steels. The purpose of this study is to support the author's theory on the mechanism of multiple-line boundaries of ferrite grains (Ref. 1: I. Hrivňák: Hutnické listy 15, 1960, no. 6, 432) and to provide additional information on the precipitation of nitrides and oxides in the Fe-N-O system. The age-hardening tests were performed with spectrally pure iron (Johnson, Mathey and Co.) and with commercial ČSN 11 370.3 low-carbon steel. Prior to the tests, both steel types were homogenized for 4 hrs at 950°C, cooled in air to 700°C, and

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Thermal and phase ...

then quenched in water. The age-hardening was performed at 100, 200, 300, and 400°C with hardening periods of 10 min, 1, 10, 50, and 100 hrs. Several specimens were also "annealed" at room temperature (approximately 25°C) during one month. The influence of age-hardening was investigated by microscopic viewing of polished sections; by electron-microscopic investigation of extraction carbon and film replicas (which were also used for transmission electron-microscopy); and by microhardness tests according to the Hannemann method with a load of 50 g. Electron microscopes used were the Czechoslovak Tesla BS-242 (selective diffraction in the range $< 3\mu$), and a Czechoslovak experimental high-resolution electron microscope. The investigation by diffraction on reflection was performed on a Trueb & Teuber apparatus. The test results can be interpreted as follows: Contrary to the currently accepted theory that the nitride precipitation from an oversaturated Fe-N solid solution starts with α "-Fe₁₆N₂, which subsequently transforms into the cubic γ "-Fe₄N, the present study has shown that in age-hardening of spectrally pure and commercial-grade low-carbon irons, the nitride precipitation

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starts with the hexagonal ϵ -Fe₃N (already after 10 min at 100°C) which, at longer hardening periods, transforms (over the transient phase ζ -Fe₂N) to α "-Fe₁₆N₂ and, finally, to the stable, cubic γ '-Fe₄N (at 300°C after 100 hrs). The precipitation and transformation are accompanied by an increase of hardness. The first ϵ -Fe₃N particles are coherent with the (100) planes of α -Fe, as was morphologically established by etching ferrites to the (100) planes. The ϵ -Fe₃N precipitation nucleates at dislocations and other lattice defects and is also prominent on mosaic boundaries (veining). The fact that nucleation does not start at grain boundaries can be explained either by the assumption that grain boundaries are not regions of increased N concentration, or that they are regions with increased free energy and interstitial-element concentration so that N atoms are not forced to undergo transition into precipitates. A. N. Tsou, J. Nutting, and J. W. Menter (Ref. 5: Iron Steel Inst. 172, 1952, 163) observed γ -Fe lines on grain boundaries of quenched specimens, which they attributed to increased concentration of strongly austenite-forming N. However, such γ -lines were not found

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Thermal and phase...

in tests described in this paper and it may almost be taken for granted that the N concentration on the grain boundaries is not greater than in the grains themselves. More convincing data were obtained on the precipitation of oxides which was investigated in pure iron at 750°C and in commercial-grade iron at 100, 200, and 300°C. It was found that iron oxides in oversaturated α -Fe solid solutions precipitate as α -Fe₂O₃ in the form of disk-shaped particles, 500 - 800 Å in diameter. In pure iron, a highly symmetrical precipitation takes place in the (100) planes of α -Fe. In wide-angle grain boundaries this symmetry is disturbed and the oxide particles form several zones (lines) parallel to the boundary direction. The boundary line itself forms a so-called "neutral zone", approximately 1,000 Å wide, in which no oxide precipitation takes place. The results of the study of oxide and nitride precipitation appear to support the dislocation model of wide-angle grain boundaries as a system of Burgers boundaries, as previously proposed by the author (Ref. 1: Op. cit.). However, transmission-electron-microscopic investigation of thin aluminum foils (0.2 mm thick, 99.999% Al), made in an effort

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Thermal and phase...

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to support the dislocation model of wide-angle grain boundaries, has failed to produce the expected confirmation thus far. The study is being continued and will be described in a separate paper. Appreciation is extended to the Institute Director, Academician J. Čabelka and V. Drahoš and A. Delong of the ČSAV Brno (Czechoslovak AS, Brno). (Technical Editor: Doctor of Natural Sciences A. Zapletálek of the VÚZ, Bratislava). There are 28 figures, 7 tables and 29 references: 7 Soviet-bloc and 22 non-Soviet-bloc. The references to the four most recent English-language publications read as follows: W.B. Pearson, A Handbook of Lattice Spacings and Structures of Metals and Alloys, Pergamon Press, London 1958; G.R. Booker, J. Norbury, A.L. Sutton, J. Iron Steel Inst. 187, 1957, 205; A. U. Seybold, J. Metals 6, 1954, 641; E.F. Hollaender, Czechoslovak Journ. Phys. 9, 1959, 754.

ASSOCIATION: VÚZ Bratislava.

Card 5/5

BRUVNAK, Ivan, inz., C.Sc.

Metallurgical weldability of mild structural steel. Zvar sbor 11
no.4:401-427 '62.

1. Vyskumny ustav zvaracsky, Bratislava.

270065764 0000/006 0522/0536

270065764 0000/006 0522/0536

TITLE: Analysis and structural stability of austenite-ferrite
welded joints.

SOURCE: Kovove materialy, no. 6, 1964, 522-536

1964 1964: Austenite ferrite joint, welded joint ferritic pearli-
tite steel, CSN 17 425, CSN 17 482, CSN 17 483, weldability, austen-
tite steel.

ABSTRACT: The metallurgical weldability of welded joints was studied
in low alloy ferritic steel and in CSN 17 482 and 17 483
low alloy ferritic steels by two techniques, electric resistance
butt welding, and arc welding with the use of a filler material.
The following criteria were considered: 1) the possibility of de-
carbonizing the ferritic part of the joint and carburizing the form-
ing austenitic interlayer; 2) the relative values of microhardness,
and width of the ferritic interlayer; and 3) the structural stability
of the interlayer after artificial tests or in service. It was found

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Figure 2

Figure 2. Weldability of 15-225-1881

It is also noted that the joints do not fully comply with the requirements for weldability, since in certain of the joints a brittle side was observed, together with a certain amount of austenite along the grain boundaries. The results of the critical weldability are partially fulfilled, except for the heat treatment (e.g., 750 for 30 min) which after cooling to room temperature combines the interstitial carbon with the stable martensite phase and thus blocks the process of diffusion through the interlayer. The combination 15-225-1881 or 15-225-1881-1881 is metallurgically weldable, even without additional preheating heat treatment. The combination 15-225-1881-1881-1881 is satisfactory with electric arc welding, even after service for several thousand hours at 500-575C. Orig. art. has: 15 figures and 1 table.

Author: Vysokomý, Oľav, Zvaracský, Bratislava (Welding Research Institute)

Card 1 of 3

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Page 3/3

HRIVNAK, Ivan

The C-Au-C and C-PtPd-C extraction replica for electron microscopic analysis. Hut listy 16 no.1:49-52 Ja '61.

1. Vyzkumny ustav zvaracsky, Bratislava.

HRIVNAK, Ivan, inz. .

Application of electron diffraction on the reflection in the BS-242
electron microscope. Hut listy 16 no.9:666 S '61.

1. Vyskumny ustav zvaracsky, Bratislava.

HRIVNAK, Ivan, inz., C.Sc.

Metallurgical weldability of mild structural steel. Zvar sbor
11 no.3:289-326 '62.

1. Vyskumny ustav zvaracsky, Bratislava.

HRIVNAK, Ivan, okleveles mernok

The effect of oxygen, nitrogen and carbon situated among the lattice points on the properties of low-carbon steels. Koh lap 95 no.9:428-432 S '62.

1. Hegesztéstechnikai Kutató Intézet, Bratislava, Czechoslovakia.

HREVNAR, I., inz. CSc.

Metal plating apparatus used in electron microscopy. Jamma mech
opt 9 no.5:144 My '64.

CZECHOSLOVAKIA

HRIVNAK, J; STOTA, A; DOLEZAL, J; SUBINOVA, A.

Research Institute of Agrochemical Technology (Forschungs-
institut fuer agrochemische Technologie), Bratislava
(for all)

Prague, Collection of Czechoslovak Chemical Communications,
No 10, 1965, pp 3272-3277

"Gas Chromatographic Determination of Chloroformic Acid
Alkylesters."

HRIVNAK, J.

Evaluation of the activity of sponsoring factories of machine-tractor stations. p. 36.
MECHANISACE ZEMEDELSTVI. Vol. 5, No. 2, Jan. 1955.

SO: Monthly East European Accession (EEAL), LC, VOL. 4, No. 9, Sept. 1955 Uncl.

HRIVNIAK, J.

HRIVNIAK, J. The management of machine-tractor stations in the Bratislava district
p. 404.

Vol. 6, No. 21, Nov. 1956
MERCHANISACE ZEMEDELSTVI
AGRICULTURE
Praha, Czechoslovakia

So: East European Accession, Vol. 6, No. 3, March 1957

HRIVNAK, J.

Should district agronomists of machine-tractor stations be incorporated into collective farms? p. 199. (Mechanisace Zemedelstvi, Vol. 7, No. 9, May 1957, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 8, Aug 1957. Uncl.

HRIVNAK, Jan; MICHALEK, Milan; STOTA, Zdenek

Determining the phthalimide content from the melting point of binary mixture. Chem prum 13 no.1:18-19 Ja '63.

1. Vyskumny ustav agrochemickej technologie, Bratislava.

HRIVNAK, J., inz. CSc.

Determining fat acids in muddy waters and waste waters by
gas chromatography. Vodni hosp 14 no.10:394, 195 '64.

PALO, Vladimir; HRIVNAK, Jan

Free fat acids in sheep milk. Prum potravin 16 no.4:198-
199 Ap '65.

1. Chemistry of the Slovak Higher School of Technology, Bratislava
(for Palo). 2. Research Institute of Agrochemical Technology,
Bratislava (for Hrivnak). Submitted December 4, 1963.

Method, Jan: 1964. Item: VESBA, Bratislava

Colorimetric determination of trichloromethylsulfonyl chloride
in the atmosphere of the working area. Prac. lek. 16 no.8:372-
373 C 64.

1. Vymaňový systém automatickej technologic v Bratislave (vymaň-
ovačská ing. V. Batom, OSR.).

HRIVNAK, Jan, inz. CSc; PALO, Vladimir, inz.

Gas chromatography of nonesterified fat acids in dairy products. Chem zvesti 18 no.4:294-298 '64

1. Research Institute of Agricultural Chemical Technology, Bratislava (for Hrivnak). 2. Department of Technical Microbiology and Biochemistry, Slovak Higher School of Technology, Bratislava, Kollarovo namesti 2 (for Palo).

HRIVNAK, Jan; VESELA, Zlatica; SOHLER, Ervin; DRABEK, Jozef

Study on reesterification of ethyl acetate by
methanol with the aid of gas chromatography. Chem
prum 15 no.1:7-9 Ja '65.

1. Research Institute of Agricultural Chemistry Technology,
Bratislava.

HRIVNAK, J., inz. CSc.; SCHIESSL, O., inz.; SOHLER, E., promovany
chemik

Determining chlorated phenols in waste water by gas
chromatography. Vodni hosp 14 no. 3:119-120 '64.

HRIVNAK, J., inz., CSc.; SCHIESSL, O., inz.

Determination of chlorinated cresols in waste waters by
gas chromatography. Vodni hosp 14 no. 1:39-40 '64.

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ACCESSION NR: AP5024267

CZ/0043/64/000/009/0692/0697 30 B

AUTHOR: Hrivnak, J. (Grivnyak, Ya.) (Engineer, Candidate of sciences) (Bratislava);
Shteta, Z. (Shteta, Z.) (Engineer) (Bratislava)

TITLE: Determination of isomers of trichlorobenzene by gas chromatography

SOURCE: Chemicke zvesti, no. 9, 1964, 692-697

TOPIC TAGS: isomer, gas chromatography, benzene, chlorinated organic compound

ABSTRACT: A method is described of determining all isomers of dichlorobenzene, trichlorobenzene, and tetrachlorobenzene in the technical-grade trichlorobenzene by means of gas chromatography. 1,1,1-trichloro-2-methyl-propane-2-ol was used as the "inner standard." "We thank Eng. M. Livarov for execution of fractionation analysis and graduate chemist E. Sohler for technical assistance." Orig. art. has: 1 figure, 1 graph, and 3 tables.

ASSOCIATION: Vyakumny ustav agrochemickej technologie, Bratislava (Research Institute for Agrochemical Technology)

SUBMITTED: 27Jan64

NR REF SOV: 000

ENCL: 00

OTHER: 007

SUB CODE: OC, GC

JPRH

Cord 1/1

L 33236-66

ACC NR: AP6023843

SOURCE CODE: CZ/0043/65/000/009/0711/0714

AUTHOR: ~~Hrivnak, Jan~~—Grivnyak, Ya. (Engineer; Bratislava); Vesela, Zlatica
(Engineer; Bratislava) 17
B

ORG: Research Institute for Agrochemical Technology, Bratislava (Vyskumny ustav
agrochemickej technologie)

TITLE: Investigation of the chlorination of methyl acetoacetate by means of gas
chromatography

SOURCE: Chemické zvesti, no. 9, 1965, 711-714

TOPIC TAGS: gas chromatography, chlorination, chemistry technique

ABSTRACT: Chlorination of the methylester of acetoacetic acid was investigated by
means of gas chromatography. The reaction mixture was analyzed in a glass column
4 mm in diameter and 1.6 m high, filled with Celito 545 (grain size 0.16-0.20 mm).
The operating temperature was 130°C. The celite contained 13% of di-2-ethylhexyl
sebacate and 2% of polyethylene glycol 400. The carrier gas was hydrogen. When
chlorine was used for chlorination 2-chloro- and 2,2'-dichloroacetic acid methylester
were formed; when sulfuryl chloride was used for the chlorination only the first
product was formed. Orig. art. has: 2 figures. [JPRS]

SUB CODE: 07 / SUBM DATE: 20Jan65 / ORIG REF: 001 / SOV REF: 002

OTH REF: 010

Card 1/1

L 33691-66 EWP(J) RM/JW

SOURCE CODE: CZ/0043/65/000/011/0846/0849

ACC NR: AP6024208

AUTHOR: Hrivnak, Jan--Grivnyak, Ya. (Engineer; Candidate of sciences; Bratislava);
Stota, Zdonek--Shtota, Z. (Engineer; Bratislava); Dolezal, Jozef--Dolezhal, Ya. (Engineer; Bratislava) B

ORG: Research Institute for Agricultural Chemical Technology, Bratislava (Vyskumny
ustav agrochemickej technologie)

TITLE: Separation of alkyl carbonates of 2-phenyl-4,6-dinitrophenol¹ by gas
chromatography

SOURCE: Chemicko zvesti, no. 11, 1965, 846-849

TOPIC TAGS: gas chromatography, chemical separation, organic nitro compound,
analytic chemistry, chemical purity

ABSTRACT: Direct determination of n- and iso-alkyl (C1-C8)-
carbonates of 2-phenyl-4,6-dinitrophenols was studied by means
of gas chromatography. Polyethylene-glycol adipate, Aprezon L,
and silicon grease SE 301 were used as anchor phases, nitrogen
as carrier gas, and detection was made by a flame ionization
detector. Practically, the method is suitable for determination
of purity and the analysis of some products. Orig. art. has: 2 figures
and 1 table. [JPRS]

SUB CODE: 07 / SUBM DATE: 04Mar65 / ORIG REF: 002 / OTH REF: 012

Card 1/1 PB

L 31336-66

ACC NR: AP6021118

SOURCE CODE: CZ/0043/65/000/012/0942/0943

AUTHOR: Hrivnak, J.--Grivnak, Ya. (Engineer; Candidate of sciences; Bratislava); 18

ORG: Research Institute for Agrochemical Technology, Bratislava (Vyskumny ustav agrochemickej technologie) B

TITLE: Injection block for gas chromatography

SOURCE: Chemické zvesti, no. 12, 1965, 942-943

TOPIC TAGS: gas chromatography, chemical laboratory apparatus

ABSTRACT: The author describes a block which he designed; it has a minimum dead space and the analyzed substance is contained in a glass tube which is removable and replaced for every new analysis. The tubes may be washed and reused, if desired. Cleaning of the metal block is thus completely avoided. Orig. art. has: 3 figures.

[JPRS]

SUB CODE: 07 / SUBM DATE: 26Jun65 / ORIG REF: 001 / OTH REF: 004

Card 1/1 9.0

Hrivnak, L.

Remarks about L. Valenta's paper, "Spontaneous Magnetization of a
Linear Model of a Ferromagnetic Toroid in a Magnetic Field." P. 95
CESKOSLOVENSKY CASOPIS PRO FYSIKU. (Ceskoslovenska akademie ved.
Ustav technicke fysiky) Praha
Vol. 6, no. 1, Jan. 1956

Source: EEAL - LC Vol. 5. No. 10 Oct. 1956

HRIVNAK Lubomir

CZECHOSLOVAKIA/Solid State Physics - Solid State Theory

E-2

Abs Jour : Ref Zhur - Fizika, No 5, 1958, No 10544

Author : Hrivnak Lubomir

Inst : Not Given

Title : Mean Free Path of Excitons in the Presence of Dislocations.

Orig Pub : Chekhosl. fiz. zh., 1957, 7, No 4, 390-396

Abstract : See Abstract 10543

Card : 1/1

HRIVNAK Lubomir

CZECHOSLOVAKIA/Solid State Physics - Solid State Theory "APPROVED FOR RELEASE: 09/21/2001" CIA-RDP86-00513R000618220015-6"

Abs Jour : Ref Zhur - Fizika, No 5, 1958, No 10543

Author : Hrivnak Lubomir

Inst : Fyz. Ustav Prirodovedeckeh Fak. Univ. Komenského, Bratislava, Czechoslovakia

Title : Mean Free Paths of Excitons in the Presence of Dislocations.

Orig Pub : Ceskosl. casop. fys., 1957, 7, No 4, 336-340

Abstract : The author investigates the influence of linear dislocations (D) on the mean free path of the non-localized exciton. The exciton is represented in the form of a hydrogen-like atom, consisting of an electron and a hole. First investigated is the scattering of the exciton, at which its internal energy does not change, on a single dislocation, which is considered constant during the time of disturbance and which is represented by an electrostatic potential of the form $V=A \sin \phi / \rho$ (where D is the distance from the axis of the dislocation). It is shown that the scattering depends on the ratio of the effective masses of the electron and the hole and on the direction of displacement of the exciton with respect to the

Card : 1/2

CZECHOSLOVAKIA/Electricity - Semiconductors

G-3

Abs Jour : Ref Zhur - Fizika, No 4, 1959, No 8528

Author : Hrivnak-Lubomir

Inst : -

Title : Mean Free Path and Mobility of Electrons in Ionic Crystals

Orig Pub : Ceskosl. casop. fys., 1957, 7, No 6, 626-633

Abstract : See Referat Zhur Fizika, 1958, No 12, 27811

Card : 1/1

Vol. 10 No. 12, 1951
Contribution to Metallurgical Examination
of Transformer Steel

The author describes the microstructure tests of trans-
former sheets of following chemical composition: 0.03 % C,
4.39 % Si, 0.10 % Mn, approx. 0.1 % Cu and traces of S.
The sheets at W. H. Schreyer's Laboratory, by means of opti-
cal microscopic examination the author found many
cases of doubling and multiplying the boundaries of ferrite
the grains.